

## Inline terminal - IB IL AO 2/UI-PAC - 2700775

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Inline analog output terminal, complete with accessories (connector connector and labeling field), 2 outputs, 0-20 mA, 4-20 mA,  $\pm 20$  mA, 0-10 V,  $\pm 10$  V, 2-wire connection method

### Product Features

- 2 analog output channels
- Connection of actuators in 2-wire technology
- Current ranges: 0 mA ... 20 mA, 4 mA ... 20 mA,  $\pm 20$  mA
- Voltage ranges: 0 V ... 10 V,  $\pm 10$  V
- Diagnostic and status indicators



### Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	100.0 GRM
Custom tariff number	85389091
Country of origin	Germany

### Technical data

#### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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#### Dimensions

Width	12.2 mm
Height	119.8 mm
Depth	71.5 mm
Note on dimensions	Housing dimensions

#### Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
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## Inline terminal - IB IL AO 2/UI-PAC - 2700775

### Technical data

#### Ambient conditions

Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (according to DIN EN 61131-2)
Permissible humidity (storage/transport)	10 % ... 95 % (according to DIN EN 61131-2)
Air pressure (operation)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Air pressure (storage/transport)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Degree of protection	IP20

#### General

Weight	66 g
Note on weight specifications	with connector
Mounting type	DIN rail
Protection class	III, IEC 61140, EN 61140, VDE 0140-1
Test section	7.5 V supply (bus logics)/24 V analog supply (analog I/O) 500 V AC 50 Hz 1 min
	7.5 V supply (bus logics) / functional earth ground 500 V AC 50 Hz 1 min
	24 V analog supply (analog I/O) / functional earth ground 500 V AC 50 Hz 1 min
Conformance with EMC directives	Noise immunity test in accordance with EN 61000-6-2 Electrostatic discharge (ESD) EN 61000-4-2/IEC 61000-4-2 Criterion B; 6 kV contact discharge, 8 kV air discharge
	Noise immunity test in accordance with EN 61000-6-2 Electromagnetic fields EN 61000-4-3/IEC 61000-4-3 Criterion A; Field intensity: 10 V/m
	Noise immunity test in accordance with EN 61000-6-2 Fast transients (burst) EN 61000-4-4/IEC 61000-4-4 Criterion B, 2 kV
	Noise immunity test in accordance with EN 61000-6-2 Transient surge voltage (surge) EN 61000-4-5/IEC 61000-4-5 Criterion B; DC: ±0.5 kV/ ±1 kV(symmetrical/unsymmetrical) supply cables; shielded I/O cables: ±1 kV
	Noise immunity test in accordance with EN 61000-6-2 Conducted interference EN 61000-4-6/IEC 61000-4-6 Criterion A; Test voltage 10 V
	Noise emission test according to EN 61000-6-3 Radio interference properties EN 55022 Class A
Diagnosics messages	Failure of the internal I/O supply I/O error message sent to the bus coupler
	I/O supply failure Message in the diagnostic code (in the IB IL format)
	Short circuit/overload of the outputs Message in the diagnostic code (in the IB IL format)
	Configuration invalid Message in the diagnostic code (in the IB IL format)

#### Interfaces

Designation	Inline local bus
Connection method	Inline data jumper
Transmission speed	500 kBit/s

## Inline terminal - IB IL AO 2/UI-PAC - 2700775

### Technical data

#### Interfaces

Transmission physics	Copper
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#### Power supply for module electronics

Communications power $U_L$	7.5 V (via voltage jumper)
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#### Inline potentials

Communications power $U_L$	7.5 V DC (via voltage jumper)
Current consumption from $U_L$	typ. 55 mA
	max. 65 mA
I/O supply voltage $U_{ANA}$	24 V DC
Current consumption from $U_{ANA}$	typ. 24 mA (No-load)
	max. 30 mA (No-load)
	typ. 38 mA (Nominal voltage load ( $U_{OUT1/2} = 10\text{ V}$ , $R_L = 1\text{ k}\Omega$ ))
	max. 45 mA (Nominal voltage load ( $U_{OUT1/2} = 10\text{ V}$ , $R_L = 1\text{ k}\Omega$ ))
	typ. 65 mA (Nominal current load ( $I_{OUT1/2} = 20\text{ mA}$ , $R_L = 0\ \Omega$ ))
	max. 75 mA (Nominal current load ( $I_{OUT1/2} = 20\text{ mA}$ , $R_L = 0\ \Omega$ ))
Power consumption	typ. 1.32 W (Nominal voltage load ( $U_{OUT1/2} = 10\text{ V}$ , $R_L = 1\text{ k}\Omega$ ))
	typ. 1.97 W (Nominal current load ( $I_{OUT1/2} = 20\text{ mA}$ , $R_L = 0\ \Omega$ ))

#### Analog outputs

Number of outputs	2
Connection method	2-wire (shielded, twisted pair)
Output name	Analog outputs
D/A conversion time	typ. 10 $\mu\text{s}$
D/A resolution	12 bit
Type of protection	Short-circuit and overload protection
	Transient protection
Protective circuit/component	Electronic
	Suppressor diode
Data formats	IB IL, S7-compatible
Representation of output values	12 bits (11 bits + sign bit)
Process data update	bus-synchronous
Current output signal	0 mA ... 20 mA
	4 mA ... 20 mA
	-20 mA ... 20 mA
Load/output load current output	$\leq 450\ \Omega$
Voltage output signal	0 V ... 10 V
	-10 V ... 10 V

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### Technical data

#### Analog outputs

Load/output load voltage output	> 1 kΩ
Precision	typ. 0.1 % (of output range final value)
	typ. 0.1 % (of output range final value)
Permissible cable length	max. 250 m (The specifications refer to nominal operation after complying with installation instructions. The specifications refer to the following reference cable type: Shielded power station cable: LiYCY; 2 x 2 x 0,5 mm <sup>2</sup> ; VDE0812)

### Classifications

#### eCl@ss

eCl@ss 4.0	27250303
eCl@ss 4.1	27250303
eCl@ss 5.0	27250303
eCl@ss 5.1	27242601
eCl@ss 6.0	27242601
eCl@ss 7.0	27242601
eCl@ss 8.0	27242601

#### ETIM

ETIM 3.0	EC001596
ETIM 4.0	EC001596
ETIM 5.0	EC001596

#### UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	43201404

### Approvals

#### Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

## Inline terminal - IB IL AO 2/UI-PAC - 2700775

### Approvals

Ex Approvals

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Approvals submitted

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### Approval details

UL Listed 

cUL Listed 

cULus Listed 

### Accessories

#### Accessories

#### Installation terminal block

Connection terminal block - AKG 4 GNYE - 0421029



Connection terminal block, Connection method Screw connection, Load current : 41 A, Cross section: 0.5 mm<sup>2</sup> - 6 mm<sup>2</sup>, Width: 7 mm, Color: green-yellow

Connection terminal block - AKG 4 BK - 0421032



Connection terminal block, Connection method Screw connection, Load current : 41 A, Cross section: 0.5 mm<sup>2</sup> - 6 mm<sup>2</sup>, Width: 7 mm, Color: black

#### Neutral conductor rail

## Inline terminal - IB IL AO 2/UI-PAC - 2700775

### Accessories

Neutral busbar - NLS-CU 3/10 SN 1000MM - 0402174



PEN conductor busbar, 3mm x 10 mm, length: 1000 mm

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### Pick-off terminal block

Connection terminal block - AK 4 - 0404017



Connection terminal block, Connection method Screw connection, Load current : 41 A, Cross section: 0.5 mm<sup>2</sup> - 6 mm<sup>2</sup>, Width: 7 mm, Color: silver

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### Shield connection clamp

Shield connection terminal block - SK 8 - 3025163



Shield connection clamp, for shield on busbars, contact resistance < 1 mOhm

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Shield connection terminal block - SK 14 - 3025176



Shield connection clamp, for shield on busbars, contact resistance < 1 mOhm

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Shield connection terminal block - SK 20 - 3025189



Shield connection clamp, for shield on busbars, contact resistance < 1 mOhm

## Inline terminal - IB IL AO 2/UI-PAC - 2700775

### Accessories

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Shield connection terminal block - SK 35 - 3026463



Shield connection clamp, for shield on busbars, contact resistance < 1 mOhm

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### Support

Support bracket - AB-SK - 3025341



Support bracket for busbars

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Support bracket - AB-SK 65 - 3026489



Support bracket, Bracket for busbars, set every 20 cm, Length: 95.5 mm, Width: 6.2 mm, Color: gray

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Support bracket - AB-SK/E - 3026476



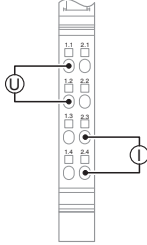
Support bracket, Bracket for busbars, set every 20 cm, Length: 10 mm, Width: 56 mm, Height: 20 mm, Color: silver

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### Drawings

## Inline terminal - IB IL AO 2/UI-PAC - 2700775

Connection diagram



Dimensioned drawing

